5. The method of claim 1 wherein the semiconductor polishing process comprises a wet etch process and the liquid comprises water.

REMARKS

Rejections under 35 U.S.C.§§112 and 101

Claims 1 and 3-5 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as his invention. Applicant traverses.

Claim 1 is amended to recite, in pertinent part, "[a] method of preparing a liquid for a semiconductor fabrication **polishing** process comprising ... the liquid having the increased total dissolved gas concentration for **use in the** polishing process" (emphasis added).

The word "employing" is removed thus making the final phrase descriptive and tying in with the language of the preamble that the liquid being prepared is for a semiconductor fabrication polishing process. Applicant believes that such amendment overcomes the rejection under §112 as no positive statement of use is recited such as might be understood where "employing" was present in the claim.

Applicant respectfully asserts that by and through this amendment the rejection of Claim 1 under §101 is also overcome as the step reciting "employing" the prepared liquid is removed.

Claims 3-5 depend from Claim 1. Thus for at least the reasons presented above for Claim 1, Applicant asserts that the rejection of such dependent claims is also overcome. It follows then that the rejections under §§112 and 101 should be withdrawn. Action to this effect is requested.

Rejections under 35 U.S.C. §102:

Claims 1 and 3-5 stand rejected under 35 U.S.C.§102(b) as being anticipated by Sakurai et al. (US 6,082,373, hereinafter "Sakurai"). Applicant traverses.

Claim 1 recites, in pertinent part, "[a] method of preparing a liquid for a semiconductor fabrication **polishing** process comprising ... the liquid having the increased total dissolved gas concentration for **use in the polishing process**" (emphasis added). In contrast, Sakurai describes and claims a cleaning method. Applicant notes that the Examiner's cited reference of Sakurai discloses a process wherein a liquid is degassified, and subsequently regassified with oxygen for utilization in an ultrasonic cleaning process. However, Applicant further notes that Sakurai does not teach or even suggest any application of a liquid which has been degassified and subsequently regassified in a polishing process. Further, Applicant notes that the reasons provided in Sakurai for degassification and subsequent regassification of the liquid are specific for the cleaning process described therein. For instance, at col. 5, lns. 6-26, Sakurai discloses that an effectiveness of particle removal during the ultrasonic cleaning taught is enhanced by the oxygen content of the water utilized. Sakurai's disclosure further advances a theory that is very

specifically directed toward ultrasonic cleaning applications that employ pure water having a concentration of oxygen dissolved therein. Sakurai does not suggest or disclose application of degassified/ regassified liquid in polishing processes.

M.P.E.P. §706.02 states that "for anticipation under U.S.C. §102, the reference must teach every aspect of the claimed invention either explicitly or impliedly." It is shown above that Sakurai DOES NOT meet this requirement. It necessarily follows then that the rejection of Claim 1 is incorrect and must be withdrawn. Claims 3-5 depend from Claim 1. Thus for at least the reasons presented above for Claim 1, Applicant asserts that the rejection of such dependent claims is also incorrect and must be withdrawn. Action to this effect is requested.

In summary, Applicant having responded to each of the rejections respectfully asserts that Claims 1 and 3-5 are in condition for allowance. Action to that effect is earnestly sought. If, however the Examiner's next action is anything other than a Notice of Allowance, the Examiner is requested to call the undersigned to schedule a telephonic interview. The undersigned is available during normal business hours, Pacific Coast Time.

Respectfully submitted,

Dated: Aug 7, 2001

By: _____
Bernard Berman
Reg. No. 37,279

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Serial No. 09/298,160
Filing Date ..... April 22, 1999
Inventor ..... Dan G. Custer et al.
Assignee ..... Micon Technology, Inc.
Group Art Unit 1746
Examiner ..... A. Olsen
Attorney's Docket No. MI22-1172
Title: Polishing Systems, Methods of Polishing Substrates, and Methods of Preparing Liquids for Semiconductor Fabrication Processes

VERSION WITH MARKINGS TO SHOW CHANGES MADE ACCOMPANYING RESPONSE TO MAY 8, 2001 OFFICE ACTION

The claims have been amended as follows. Underlines indicate insertions and ~~strikeouts~~ indicate deletions.

1. (Amended) A method of preparing a liquid for a semiconductor fabrication polishing process comprising:

providing a liquid;

degassifying the liquid; and

injecting a gas into the liquid to regassify the liquid, the regassification increasing a total dissolved gas concentration in the liquid to greater than or equal to 200 ppb, ~~and employing~~ the liquid having the increased total dissolved gas concentration for ~~a semiconductor~~ use in the polishing process.

3. The method of claim 1 wherein the providing, provides a water comprising liquid for the semiconductor polishing process.

4. The method of claim 1 wherein the semiconductor polishing process comprises an etch process.

5. The method of claim 1 wherein the semiconductor polishing process comprises a wet etch process and the liquid comprises water.